Current Status on Alternative Fuels for Transportation in Malaysia

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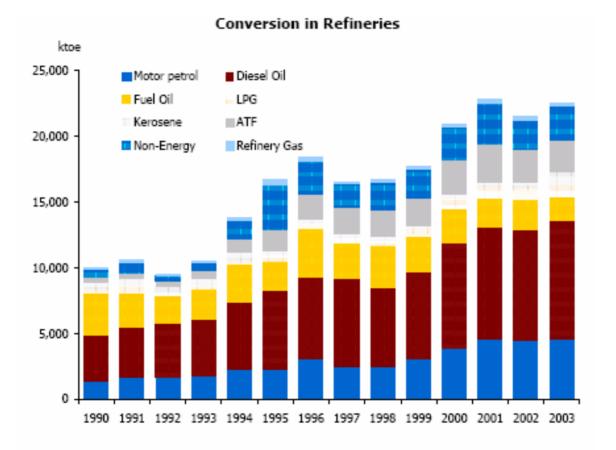
Representing The Ministry of Energy, Water and Communication Government of Malaysia



# **PRESENTATION OUTLINES**

- Alternative fuel?
- Current Activities
- Is there priority?
- Options available

# **TRANSPORTATION FUELS**



Source: Oil Companies

# **'DEMONSTRATION PROJECTS'**

# 'NATURAL GAS VEHICLE (NGV)'



•Natural Gas Vehicle Projects was started and driven by Malaysian Petroleum Company, PETRONAS (<u>www.petronas.com.my</u>) since 1986.

- •To date a total of 38 NGV refueling stations are operational mostly located around Kuala Lumpur.
- •Ten more stations are being built
- An additional of 200 stations will be Operational by 2007.
- There are around 12,000 users mainly Taxis and buses that have dual fuel system i.e. gasoline and NGV.
- Incentives for NGV users includes cheaper cost (less than half of gasoline cost), Cheaper road tax, and the conversion kits



### Issues and challenges of NGV

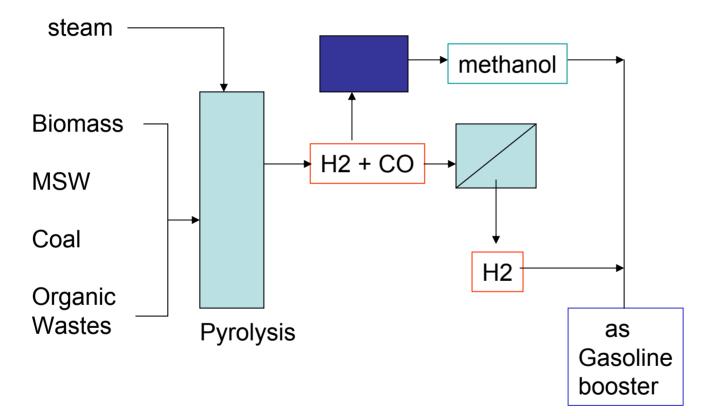
- Very slow market penetration (248 stations in 20 years)
- 12,000 users mainly buses and taxis, no private cars
- Infrastructure issues:
  - Refueling stations located in Kuala Lumpur
  - Long queue
  - Gas cylinder occupying space and adds weight
  - Reduced performance
- Government subsidy
- Not mandatory

### **BIODIESEL IN MALAYSIA**



A Bio-diesel plant is being built, expected to be operational in three years time, the plant will produce 5,000 tones (approximately 36.5 thousand barrels or 1.15 million gallons) of bio-diesel a month. The product is for export to Europe where blending infrastructure and facilities are already available. Plant cost is estimated at RM 40 millions (USD 10.5 millions). The Malaysian Palm Oil Board (MPOB) and Golden Hope Plantations are the two partners in the project

## **ALTERNATIVE FUEL OPTIONS**



# **CONCLUDING REMARKS**

Fuel blending offers better mileage, cleaner environment and minimum installation cost